



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,652	07/13/2001	Hiroshi Isono	110087	8225

25944 7590 09/23/2005

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

KING, BRADLEY T

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/903,652	<b>Applicant(s)</b> ISONO, HIROSHI	
	<b>Examiner</b> Bradley T. King	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 30 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 10, 11, 15-17 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-05</u> . | 6) <input type="checkbox"/> Other: _____  |

*A*

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-7, 10-11, 15-17 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Isono et al (EP 0 950 593).

Isono et al shows all the limitations of the instant claims including; a power-operated hydraulic pressure source 70 operable to delivery a pressurized working fluid, a brake including a hydraulically operated brake cylinder; a manually operable brake operating member 10; a master cylinder disposed between said power-operated hydraulic pressure source and said brake cylinder and operable to deliver the pressurized working fluid into said brake cylinder, in response to an operation of said manually operable brake operating member; and a flow-rate changing device (74, 75, 86, 542, 546, 547, 560, 562) disposed between said power-operated hydraulic pressure source and said brake cylinder and including said master cylinder 500, said flow-rate changing device being operable to change a relationship between a first rate of flow of the pressurized working fluid from said master cylinder into said brake cylinder, and a second rate of flow of the pressurized working fluid (from 70) into said master cylinder, such that said relationship is changed according to an operating

Art Unit: 3683

amount of said brake operating member (note that valves 74-75 change the relationship between the flow from the pump 70 and the flow from the master cylinder to the brake), said flow-rate changing device being operable during a normal braking operation to control a pressure of the working fluid in said brake cylinder (see figure 23), such that the pressure of the working fluid in said brake cylinder changes with a change of the operating amount of said operation of said manually operable brake operating member. See figure 22.

Regarding claim 2, Isono et al disclose all the limitations of the instant claim including; a power-operated hydraulic pressure source 70 operable to deliver a pressurized working fluid; a brake including a hydraulically operated brake cylinder; a manually operable brake operating member 10; a master cylinder 500 disposed between said power-operated hydraulic pressure source and said brake cylinder and operable to deliver the pressurized working fluid into said brake cylinder in response to an operation of said manually operable brake operating member; and a flow-rate changing device (74, 75, 86, 542, 546, 547, 560, 562) disposed between said power-operated hydraulic pressure source and said brake cylinder and including said master cylinder 500, said flow-rate changing device being operable to change a rate of flow of the pressurized working fluid from said master cylinder into said brake cylinder, which rate corresponds to a given rate at which the pressurized working fluid is delivered into said master cylinder as a result of an operation of said power-operated hydraulic pressure source; wherein said master cylinder includes (a) a housing 502, and (b) a pressurizing piston 504 fluid-tightly and slidably fitted in said housing, said pressurizing

Art Unit: 3683

piston having two pressure-receiving surface areas which are different from each other and which respectively partially define a front pressurizing chamber 508 and a rear pressure chamber 512 on front and rear sides of said pressurizing piston, said master cylinder being operable to supply said brake cylinder with the pressurized working fluid delivered from said front pressurizing chamber as said pressurizing piston is advanced, and wherein said flow-rate changing device includes a switching device 546 having a first state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source 70 to said rear pressure chamber which has a smaller one of said two pressure-receiving surface areas (when valve 546 is closed), and a second state in which the pressurized working fluid is delivered from said power-operated hydraulic pressure source to said front pressurizing chamber 508 (when valve 546 is opened).

Regarding claim 3, note the rear chamber 512 has a smaller area due to the area of the input rod which reduces the pressure receiving area of the chamber. Isono et al also shows a discharge-flow inhibiting device 75.

Regarding claim 4, Isono et al further show a check valve 74 or the unlabeled valve next to the accumulator 72.

Regarding claim 30, see control valve device 44.

### ***Response to Arguments***

Applicant's arguments filed 7/11/2005 have been fully considered but they are not persuasive.

Art Unit: 3683

It is maintained that the assisting device 538 of EP'593 reads upon the claimed flow-rate changing means. Applicant's arguments that the pressurized fluid of EP '593 is not delivered from the pump to the pressurizing chambers or assisting chamber in normal braking operation is narrower than the limitations of claim 1, and appears to contradict the disclosure of the reference. It is clear from the disclosure that valves 74 and 560 operate to supply pressure to the assisting chamber 512 (part of the master cylinder) to increase braking during normal operation. Note figure 23. Also note that claim 1 does not require the flow-rate changing device to change the relationship between first and second flow rates during normal braking, just that the device be "operable during a normal braking operation to control a pressure of the working fluid in said brake cylinder, such that the pressure of the working fluid in said brake cylinder changes with a change of the operating amount of said operation of said manually operable brake operating member". Claims 2 and 4 are completely silent as to any normal operation. It is maintained that the rejections are proper.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not


Art Unit: 3683

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ROBERT A. SICONOLFI  
PATENT EXAMINER

*9/19/05*

BTK